

ABSTRACT

[0052] Memory devices in accordance with the present invention can comprise a molecular memory integrated circuit including a set of actuators capable of moving one or more platforms. In one embodiment the platforms can include either a memory device or a Molecular Array Read/Write Engine (MARE) with a cantilever system having at least one cantilever tip. When a first platform with a memory device is brought within close proximity of a second platform with a MARE, the actuators can position the cantilever tip to a specific location on the memory device. The tip of the cantilever can perform a number of functions to the memory device, including reading the state of the memory device or changing the state of the memory device. This description is not intended to be a complete description of, or limit the scope of, the invention.